Degree Course MSc in ARCHITECTURE

Qualification offered: Master of Science degree in Architecture (MSc)

2021

Possible specializations
- architectural design and interior design (ArchD)
- urban design and chief planner/architect (UrbD)

Duration of the program: 4 full time sessions

Program director: Prof. Dr. Gyula Kiss DLA

Specializations' supervisors
- Ass. Prof. Csaba Rohoska DLA (architectural and interior design)
- Coll. Prof. Tamás Lukovich PhD (urban design and chief planner/architect)

Total number of credits required for the degree: 120 credits
- the orientation of the course: 'balanced'
- final project: 26 credits
- elective subjects minimum: 6 credits

Disciplines and professional fields the course comprises:
- development of creative skills, visual arts, social and natural sciences, economics, law, technical studies: **12 credits**
- mandatory professional subjects (building design, design methodology, history of architecture and cities, urban planning, statutory development control, heritage conservation, architectural theory, design of supporting structures, design of building structures, building services, building technologies, building physics and energy efficiency, environmental conscious design, fire protection, architectural presentation, colour dynamics, CAD, BIM, building materials, complex design project): **36 credits** (+ 26 credits for the final project)
- the value of specialization within the complete course: **41 credits**

The educational objectives of the master course and the professional competencies
To train architects for the entire practice of architecture, who, due to their knowledge and skills, are capable to manage technical tasks on their own while being aware of the social and the environmental impacts of architecture. They are also enabled to continue their studies for PhD.
During the course, due attention is paid to the principles, and required knowledge and skills included in paragraph 46 of the 2005/36 EC decree by the European Parliament and the Council.

The system of assessment
The study requirements and their actual forms, the system of assessment, the consequences of failing to meet the study requirements and the mode of making up for it are determined by the relevant regulations, the Study and Examination Rules of the University and the program curriculum, respectively.
Assessments of the acquired knowledge are conducted via different forms of examinations and/or continuous performance monitoring of seminars.
The system of continuous monitoring includes theoretical and practical assignments, home-works, complex semester projects, essays and final project work.

The final project
A condition of graduation is the elaboration and the submission of the final project.
The student, through this project, demonstrates that he/she can apply the acquired knowledge in practice, can find his/her way in professional literature beyond the curriculum, able to find appropriate methods and to draw the right conclusions in dealing with academic and/or professional problems. Thus, the preparation and the presentation of the final project prove that the student is capable of solving various design problems, conducting research, and he/she can apply his/her professional knowledge in everyday practice.

The formal requirements of the final project are determined by the Faculty.

Preconditions of the final exam
Fulfilment of the obligations according to the course rules, and the collection of necessary credits; i.e. the obtainment of the 'absolutory'.

The elements of the final graduation examination
- the free-style presentation and successfully debating the critique of the final project, and
- an oral exam, including comprehensive questions related to the final project.

The calculation of the final exam mark (FE)
FE=(2FP + PFP + OE): 4
where FP: stands for the mark for the final project
PFP: is the result of the final project presentation, and
OE: is the mark for the oral exam

The calculation of the graduation result (GR)
GR=(2FE +WAM): 3
where FE: stands for the final exam mark, and
WAM: is the weighted average of all marks throughout the entire course

Professional competencies to acquire

The Architect's

a) knowledge
- he/she is adequately familiar with social sciences involved and the social processes that affect architecture
- familiar with the history of architecture, its main periods and outputs, and their relationships with other forms of art
- familiar with the main theories of contemporary architecture, with its dominant designers and their outstanding buildings
- understands the relationships and the interactions between man and the built and natural environments
- familiar with design principles and the steps of the process involved
- familiar with the functional, social and legal requirements of various building types
- familiar with the history of settlements and aware of the principles and means of urban development
- familiar with the various supporting and building structures, their selection, construction and calculation principles and methods, the characteristics of building materials, with special attention to standard technical requirements
- familiar with the up-to-date principles and typical solutions of energy efficient environmental design
- possesses suitable knowledge of engineering disciplines that contribute to building
- familiar with the various types of architectural presentation and documentation techniques and with their requirements; able to apply CAD and has an overview of other IT possibilities and means
- familiar with the technical, economic and legal requirements, technologies and procedures, respectively, involved in implementation, real estate development and management, respectively, including the measurement, documentation, maintenance and reconstruction of the building stock
- familiar with the principles, rules and means of heritage conservation
- aware of the profession's social obligations, including social, economic, legal, ethical and technical factors
- familiar with the principles and methods of quality control in architectural design and building, and has an overview of various quality assurance systems
- according to the specialisation chosen, he/she has a deeper knowledge in at least one sub-field of architecture

b) skills
- he/she is able to develop an appropriate architectural and/or urban planning program, according to the particular function(s), context and needs, including the compilation of the brief of requirements
- able to overview the entire design process from conceptual development, through detailed design to implementation, and able to select the most appropriate solutions (i.e. materials and layouts)
- able to comprehensively handle aesthetic, functional, technical, economic, social and legal expectations throughout the design process, and to deliver architectural designs accordingly
- able to think through the problems of supporting and building structures, building services, to develop their concepts and to apply them in practice, including the determination of their approximate space requirements
- able to use different technologies, models and various IT software in designing, building and operation
- able to efficiently take part in the preparation of urban development schemes and development control plans
- able to make estimates for possible costs, values, impacts and for the feasibility of the planned building
- able, with due diligence, to consider and to apply new products, structures and technologies
- able to sort, observe, and analyse information collected during the design, implementation and operational processes, and to conclude the lessons, including the feedback into practice

- able to distribute, share and prioritize architectural tasks; able to manage working groups and to integrate the input of other engineering fields taking part in the design process
- able to, manually as well as digitally, create architectural documentations at high standards, including the quality of graphics, according to relevant standards and regulations
- able to create real and virtual mock-ups and architectural presentations
- according to the specialization chosen, he/she possesses higher level skills at least in one sub-field

c) attitudes
- with his/her high standard and harmonic product, he/she endeavours to satisfy human needs at a human scale, and to meet aesthetic and technical requirements, too
- endeavours to solve problems with a process oriented system approach in a creative manner; able to switch between intuition and knowledge based approaches, when necessary
- endeavours, with considering ecological aspects, to develop future oriented, sustainable and energy efficient buildings
- he/she is open to the absorption of new information and endeavours to continuously improve his/her general and professional education, respectively
- he/she is an initiator who endeavours to share complex jobs with setting up working groups, while appreciating knowledge provided by fellow colleagues and experts involved
- endeavours to use architecture as a community service and is sensitive for human problems, environmental and social challenges, while appreciates traditions and the values of built and natural heritage
- endeavours to comply with regulations and ethical norms, including health at workplace, safety, technical, legal and economic requirements

d) autonomy and responsibility
- in case of professional problems, he/she initiates action on his/her own
- he/she is able to manage working groups sized to his/her experience, but also able to work as a member of a group, under supervision
- following careful considerations, including consultation with other relevant experts if necessary, he/she is able to make decisions and to take responsibility for them
- he/she is aware of his/her own personal, financial and moral responsibilities and the social impact of the built environment

Further skills at the 'architecture and interior design' specialization
- he/she possesses deeper than the average knowledge and skills in the following fields: architectural aesthetics, interior design, housing, community building design, design of special technology buildings, architectural theory, heritage conservation, industrial design, environmental design, building comfort, barrier free design, urban sociology, environmental psychology, and safety and security by architecture and town planning, respectively

Further skills at the 'urban design and chief planner/architect' specialization
- he/she possesses deeper than the average knowledge and skills in the following fields: urban planning, landscape architecture, housing, community building design, urban sociology, environmental psychology, urban infrastructure, real estate development, project management, building law and administration, energy management of buildings, barrier free design, architectural ecology, IT for architects, fire protection, operation of buildings and towns, and safety and security by architecture and town planning

MANDATORY SUBJECTS (A)

Code	Course	Le	P	La	R	Credits	Preconditions
YAXARTHMNF	Architectural Theory	3	0	0	E	3	Cultural History II.
YAXCUH1MNF	Cultural History I.	3	1	0	E	5	-
YAXCUH2MNF	Cultural History II.	3	1	0	E	5	Cultural History I.
YAXREMEMNF	Research Methodology	2	0	0	E	2	-
YAXAPS1MNF	Applied Studies I.	1	2	0	M	3	-
YAXAPS2MNF	Applied Studies II.	1	2	0	M	3	Applied Studies I.
YAXGED1MNF	Generative Design I.	1	2	0	M	3	-
YAXGED2MNF	Generative Design II.	1	2	0	M	3	Generative Design I.
YAXCOD1MNF	Complex Design I.	0	6	0	M	10	-
YAXCOD2MNF	Complex Design II.	0	6	0	M	10	Complex Design I., Community and Urban Planning (Urban)
YADFIPRMNF	Final Project	0	18	0	M	26	Complex Specialization (Architecture) or Complex Specialization (Urban)

MANDATORY ELECTED SUBJECTS (B) for Specialization Architectural Design and Interior Design

Code	Course	Le	P	La	R	Credits	Precondition
YAWBLAAMNF	Building Law and Administration	2	0	0	M	2	-
YAWINDEMNF	Interior Design	2	2	0	M	5	-
YAWEEEAMNF	Energy Efficient and Ecological Architecture	2	0	0	E	2	-
YAWFPCTMNF	Final Project Consultation	0	4	0	M	2	– Complex Specialization (Architecture) or Complex Specialization (Urban)
YAWFODEMNF	Form and Design	1	2	0	E	5	Applied Studies I.
YAWCSPAMNF	Complex Specialization (Architecture)	0	6	0	M	10	Complex Design II.
YAWENDEMNF	Environmental Design	2	2	0	M	5	Community and Urban Planning
YAWCOUPMNF	Community and Urban Planning	2	2	0	E	4	-
YAWRDDAMNF	Related Disciplines of Design (Architecture)	2	2	0	M	4	Complex Design I, Community and Urban Planning

MANDATORY ELECTED SUBJECTS (B) for Specialization Urban Design and Chief Planner/Architect

Code	Course	Le	P	La	R	ECTS	Precondition
YAWBLAAMNF	Building Law and Administration	2	0	0	E	2	-
YAWMAAAMNF	Municipal Architecture and Administration	2	0	0	M	3	-
YAWCSPUMNF	Complex Specialization (Urban)	0	6	0	M	10	Complex Design II.
YAWEEEAMNF	Energy Efficient and Ecological Architecture	2	0	0	E	2	-
YAWFPCTMNF	Final Project Consultation	0	4	0	M	2	Complex Specialization (Architecture) or Complex Specialization (Urban)
YAWENDEMNF	Environmental Design	2	2	0	M	5	Community and Urban Planning
YAWCOUPMNF	Community and Urban Planning	2	2	0	E	4	-
YAWREDUMNF	Related Disciplines of Design (Urban)	2	2	0	M	4	Complex Design I, Community and Urban Planning
YCWURINMNF	Urban Infrastructure	1	2	0	M	4	Community and Urban Planning
YAWURPAMNF	Urban Public Administration	2	0	0	M	3	-

ELECTIVE SUBJECTS (C)

An updated list of elective subjects can be found on the Faculty website.

Le: lecture **P:** practice **La:** laboratory **R:** result (mid-term mark, exam mark) **ECTS:** number of credits

MSc in Architecture – Specialization: Architectural Design and Interior Design

		1. semester	2. semester	3. semester	4. semester		
lectures/week	1	**Cultural History I.** **YAXCUH1MNF** 3/1/0/E/5	**Cultural History II.** **YAXCUH2MNF** 3/1/0/E/5	**Architectural Theory** **YAXARTHMNF** 3/0/0/E/3	**Final Project Consultation** **YAWFPCTMNF** 0/4/0/M/4	1	lectures/week
	2					2	
	3					3	
	4			**Form and Design** **YAWFODEMNF** 1/2/0/E/5	**Final Project** **YADFIPRMNF** 0/18/0/M/26	4	
	5	**Research Methodology** **YAXREMEMNF** 2/0/0/E/2	**Energy Efficient and Ecological Architecture** **YAWEEEAMNF** 2/0/0/E/2			5	
	6					6	
	7	**Community and Urban Planning** **YAWCOUPMNF** 2/2/0/E/4	**Related Disciplines of Design (Architecture)** **YAWRDDAMNF** 2/2/0/M/4	**Environmental Design** **YAWENDEMNF** 2/2/0/M/5		7	
	8					8	
	9					9	
	10					10	
	11	**Generative Design I.** **YAXGED1MNF** 1/2/0/M/3	**Generative Design II.** **YAXGED2MNF** 1/2/0/M/3	**Interior Design** **YAWINDEMNF** 2/2/0/M/5		11	
	12					12	
	13					13	
	14	**Applied Studies I.** **YAXAPS1MNF** 1/2/0/M/3	**Applied Studies II.** **YAXAPS2MNF** 1/2/0/M/3			14	
	15			**Building Law and Administration** **YAWBLAAMNF** 2/0/0/E/2		15	
	16					16	
	17	**Complex Design I.** **YAXCOD1MNF** 0/6/0/M/10	**Complex Design II.** **YAXCOD2MNF** 0/6/0/M/10	**Complex Specialization (Architecture)** **YAWCSPAMNF** 0/6/0/M/10		17	
	18					18	
	19					19	
	20					20	
	21					21	
	22					22	
		Elective Subject (C) 1. 3 credits	**Elective Subject (C) 2.** 3 credits				

CREDIT	**30**	**30**	**30**	**30**	**120**
EXAM	**3**	**2**	**2**	**0**	**7**

Explanation:

Name of the subject
Subject code
Lecture / practice / laboratory / M: mid-term mark; E: exam

MSc in Architecture – Specialization: Urban Design and Chief Planner/Architect

lectures/week		1. semester	2. semester	3. semester	4. semester		lectures/week
	1	**Cultural History I.** **YAXCUH1MNF** 3/1/0/E/5	**Cultural History II.** **YAXCUH2MNF** 3/1/0/E/5	**Architectural Theory** **YAXARTHMNF** 3/0/0/E/3	**Final Project Consultation** **YAWFPCTMNF** 0/4/0/M/4	1	
	2					2	
	3					3	
	4			**Urban Infrastructure** **YCWURINMNF** 1/2/0/M/4	**Final Project** **YADFIPRMNF** 0/18/0/M/26	4	
	5	**Research Methodology** **YAXREMEMNF** 2/0/0/E/2	**Energy Efficient and Ecological Architecture** **YAWEEEAMNF** 2/0/0/E/2			5	
	6					6	
	7	**Community and Urban Planning** **YAWCOUPMNF** 2/2/0/E/4	**Related Disciplines of Design (Urban)** **YAWREDUMNF** 2/2/0/M/4	**Environmental Design** **YAWENDEMNF** 2/2/0/M/5		7	
	8					8	
	9					9	
	10					10	
	11	**Generative Design I.** **YAXGED1MNF** 1/2/0/M/3	**Generative Design II.** **YAXGED2MNF** 1/2/0/M/3	**Municipal Architecture and Administration** **YAWMAAAMNF** 2/0/0/M/3		11	
	12					12	
	13			**Urban Public Administration** **YAWURPAMNF** 2/0/0/E/3		13	
	14	**Applied Studies I.** **YAXAPS1MNF** 1/2/0/M/3	**Applied Studies II.** **YAXAPS2MNF** 1/2/0/M/3			14	
	15			**Building Law and Administration** **YAWBLAAMNF** 2/0/0/E/2		15	
	16					16	
	17	**Complex Design I.** **YAXCOD1MNF** 0/6/0/M/10	**Complex Design II.** **YAXCOD2MNF** 0/6/0/M/10	**Complex Specialization (Urban)** **YAWCSPUMNF** 0/6/0/M/10		17	
	18					18	
	19					19	
	20					20	
	21					21	
	22					22	
		Elective Subject (C) 1. 3 credits	**Elective Subject (C) 2.** 3 credits				

CREDIT	**30**	**30**	**30**	**30**	**120**
EXAM	**3**	**2**	**3**	**0**	**8**

Explanation:

Name of the subject
Subject code
Lecture / practice / laboratory / M: mid-term mark; E: exam

SUBJECT DESCRIPTIONS

MANDATORY SUBJECTS (A)

Architectural Theory **YAXARTHMNF**
In charge: Ass. Prof. Gergely Nagy PhD **3/0/0/E/3**

The objective of the subject is to offer an overview of the history of architecture theory from Roman times to the end of the 20th century.
Major architectural writers and their works from antiquity to the end of the 20th century and the relationship between the theory and practice of architecture in each era are introduced. Text analysis, comparative analysis are used as methodology.

Applied Studies I. **YAXAPS1MNF**
In charge: Coll. Prof. Attila Bölcskei PhD **1/2/0/M/3**

The objective is to develop students' skills in designing architectural space and to learn how to create a digital portfolio. The visual aspects of space design are investigated and creative methods of shaping these spaces are developed through practical exercises and studies. They are to be presented with different possible computer graphics. For the outcomes, vector, bitmap, CAD files and photos will also be used.

Applied Studies II. **YAXAPS2MNF**
In charge: Coll. Prof. Attila Bölcskei PhD **1/2/0/M/3**

The aim is to provide advance studies in architectural space design with the application of geometrical forms in digital space. Students' knowledge of geometry, that can be applied in architectural design, is further developed. Introduction to the curves of movement geometry (such as roulette, cycloid, lemniscate, spirals, etc.) and to intuitive topology. Application of geometric transformations and algorithmic thinking in computer modelling. Finally, there is a synthesis of the above.

Final Project **YADFIPRMNF**
In charge: Prof. Gall Anthony PhD **0/18/0/M/26**

The students are supposed to demonstrate the architectural knowledge and the presentation skills they have acquired throughout the entire course. The particular objective is the complex application of this knowledge gained in various subjects, with special attention to the development of their conceptional design attitude, the appreciation of the built environment as a context, the logical arrangement of functions, the identification of aesthetic structural forms and the shaping of quality representative spaces. Here, it is not enough to design just a well-functioning and attractive building, but it is important to interpret the place and to identify social issues, too. The students get to their final proposal step by step through a series of design phases.

Generative Design I. **YAXGED1MNF**
In charge: Prof. Marcel István Ferencz DLA **1/2/0/M/3**

The objective is to deepen students' knowledge in 3D modelling and representation. Students are to develop their personal approach in visual creativity, including reality rendering, parametric form generations, and algorithmic and intuitive conceptual development, respectively.

Generative Design II. **YAXGED2MNF**
In charge: Prof. Marcel István Ferencz DLA **1/2/0/M/3**

The objective is the introduction and the application of the latest digital architectural software. The students are to get acquainted with the paradigm of parametric architecture, including relevant architectural theories and its special language, and with generative design techniques, and to harmonize their personal visual skills and the opportunities provided by those software with generative procedures. They are to apply their particular knowledge in several projects.

Complex Design I. **YAXCOD1MNF**
In charge: Prof. Anthony John Gall PhD **0/6/0/M/10**

The goal is to demonstrate and to practice the many sided complexity and interrelationships of building design and to comprehend the interactions among the site, the design program (i.e. the brief) and the future layout, and to make the appropriate decisions, accordingly.
The subject is the first part of the two session complex design exercise of the master program. The students are to get familiar with new situations under the supervision of their tutors. They are to develop proposals individually as well as in teamwork. Social impacts of the design program and the historical context of the site and the town, respectively, must be investigated. They are to learn the methodology of analytical designing, the unity and the relationships of form, function and structure, and

the cooperation with engineering specialists. The proposals are developed with regular work and weekly consultations. Besides the architectural design jobs, students are to prepare designated engineering specialists' tasks, too.

Complex Design II. **YAXCOD2MNF**
In charge: Prof. Gyula Gábor Kiss DLA **0/6/0/M/10**

The objective is to make the students aware and practice the complexity and interrelationships of building design. They are to understand the connections among the site, the brief and the future building layout and to make appropriate decisions. Social, economic and environmental factors are to be also considered. Communication means to successfully present the design proposals at the various design phases, including to the final public jury, are also to be mastered. This project is the second part of the two session long complex design exercise of the master program, and is about further developing one of the design projects from the previous session.

Cultural History I. **YAXCUH1MNF**
In charge: Ass. Prof. Gergely Nagy PhD **3/1/0/E/5**

The students are provided with comprehensive information about the disciplines of rehabilitation of buildings and heritage conservation. They get an insight into the typical building structures of the second part of the 19th century and the turn of the century, respectively. As a practical exercise, they are to deal with simple rehabilitation design tasks. The curriculum comprises typical building structures of the historical revival period, typical problems of historical buildings' renovation, and their solutions, the method of building diagnostics, building archaeology and documentation, and the relevant legal context, There will also be some case studies in the history of heritage conservation and contemporary projects, including their critical analyses.

Cultural History II. **YAXCUH2MNF**
In charge: Prof. Rudolf Klein PhD **3/1/0/E/5**

The subject is divided into two parts: one half is about the history of landscape architecture, and the other half is about contemporary architecture and its routes, to complement the curriculum of the history of architecture course in the undergraduate program. The landscape section reviews the different design styles throughout history, including the relationships between buildings and gardens and landscapes, respectively. This latter gets particular emphasis in contemporary practice. The architectural section discusses the historical roots and the intellectual background of contemporary movements and their relationship with other forms of art and philosophy, respectively. Besides formal lectures, students will, with the help of consultations, prepare their own studies of a selected topic. Possibly, there might be some smaller 'excursions' to the worlds of philosophy, music and literature, too. This part is also to synthesize the topics of Cultural Studies II.

Research Methodology **YAXREMEMNF**
In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD **2/0/0/E/2**

A team-based course for the transfer and application of theoretical and practical knowledge of research. The main purpose of the course is to encourage and prepare students for research in architecture topics and to prepare for the possibility of doctoral training.
In the first part of the semester, the groups carry out a critical analysis of selected research: understanding, evaluating and presenting the purpose, methodology and method of data collection. This is the basis of the semester task of building a research plan for a chosen topic, which helps exercising a consistent process and methodology.

MANDATORY ELECTED SUBJECTS (B)

Interior Design **YAWINDEMNF**
In charge: Ass. Prof. Csaba Rohoska DLA **2/2/0/M/5**

The objective is to introduce the students to interior design through the shaping of interior architectural space. A considerable emphasis is put onto the presentation and application of various products by local and international manufacturers in relation to architectural tasks selected, including traditional and experimental modes. Students will learn a wide range about those materials, objects and products (lighting, finishes, furniture) they less frequently meet in the course of their architectural designs. Applying them, they will also solve a problem connected to their previous complex design project. During the session, students will also learn how to present interior design ideas freehand and with CAD, as well. There is an important emphasis put on complexity.

Building Law and Administration **YAWBLAAMNF**
In charge: Coll. Prof. Tamás Lukovich PhD **2/0/0/E/2**

The general aim is to provide the students with some basic knowledge of building law and administration. The curriculum includes the foundations of civil law and public administration, the legal concept of real estate, the players of the development process, and the role and place of public administration. There is a special attention to information on statutory administration procedures and services through practical examples and exercises.

Complex Specialization (Architecture) **YAWCSPAMNF**
In charge: Prof. Gyula Gábor Kiss DLA **0/6/0/M/10**

The objective is to prepare the students for their final project. After completing the master course, the students are to take their own positions. They are to apply in complexity the knowledge they have acquired in various subjects throughout the whole course, with special attention to the development of their conceptual design attitude and how it is exercised, including the fitting of their proposals into the existing built fabric, the logical and clear linking of functions and the formation of aesthetic structures and quality spaces, respectively.
The forms of tutoring include a practical week with partly individual and partly with teamwork. The proposals will be presented at each main design phase, and the final proposal is to be presented to and discussed with a public jury.

Complex Specialisation (Urban) **YAWCSPUMNF**
In charge: Coll. Prof. Tamás Lukovich PhD **0/6/0/M/10**

The course is to prepare the students for the high quality elaboration of their graduation (final) project. They are to apply the knowledge of urban planning and design acquired during the program. The aim is the preparation for integrated environmental planning and design, including problem solving in an interdisciplinary manner. Students' practical job is to elaborate an urban design scheme based on complex surveys, following the steps of urban planning process, including the integration of considerations by contributing engineering services. During the session, students are to work individually, as well as in teams, as a preparation for the individual final project work

Energy Efficient and Ecological Architecture **YAWEEEAMNF**
In charge: Ass. Prof. Attila Talamon PhD **2/0/0/E/2**

Educational purpose is to acquire basic knowledge in the field of energy-conscious building design ad systems. Building energy foundations, in particular the role of legal concepts and international aims. Energy efficiency architectural solutions. Basic concepts of building physics and thermal design. Complex renewable building engineering systems.

Environmental Design **YAWENDEMNF**
In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD **2/2/0/M/5**

The objective is to analyse and to evaluate the perception and the appreciation of the environment, to get acquainted with the means of developing the environment and the search for the balance of sustainability and aesthetics in both urban and rural settings at various scales, including historical aspects. Practical exercises are also included. The subject curriculum includes the history of urban space and landscape, the different scales and types of environmental design, the relevant requirements of different land use activities and the options of environmental sustainability, including ecology and rehabilitation.

Final Project Consultation **YAWFPCTMNF**
In charge: Prof. Gall Anthony PhD **0/4/0/M/4**

During the semester, students develop a "complex" plan for a specific site. During complex examination of the specified site, the student finalizes the design program, on-site inspections, studies, and explores his task with the help of creative exercises. Review and follow up of the technical and artistic content of the thesis is part of the subject. Determining optimal presentation techniques and methodologies. During the semester, the "jury members" delegated by the department will evaluate and counsel the entire class.

Form and Design **YAWFODEMNF**
In charge: Prof. Gall Anthony PhD **1/2/0/E/5**

'Form and Design' gets focus in architecture at two relations: at the process of the design of the architectonical elements and at design of the elements of the inner space, the objects of use. The aim of the course is to make the students aware of the importance of these relations and the role of the architect at them. We introduce principles of contemporary form and design of the last 50 years, students will learn about materials, objects and products (lighting, finishes, furniture and objects) and about contemporary trends and designers, and have to make a study, develop a design and prepare a model.

Community and Urban Planning **YAWCOUPMNF**
In charge: Ass. Prof. Zsuzsanna Katalin Fáczányi PhD **2/2/0/E/4**

The aim is to introduce the students to the notion of public participation in urban planning. Both theory and practice of the interrelationships between town as a public space and its participative planning are covered. The students get an insight into such relevant topics as the notions of the 'urban' and the 'public', the 'smart city', the analyses of 'green vs. brown field' developments, the systematic listing of the particular values of a township (including e.g. image guidelines), real estate valuation, and the issues of future urban centres, respectively. The course also includes urban and architectural design exercises related to relevant actual urban development problems.

Related Disciplines of Design **YAWRDDAMNF or YAWREDUMNF**

In charge: Prof. Gyula Gábor Kiss DLA **2/2/0/M/4**

The subject is a complementary element of Complex Design II. The objective is to get the students acquainted with legal and technical requirements of engineering specialists' contribution to architectural design and to prepare them for the practical side of it. There are lectures, professional visits, presentations and consultations in the program, related to the main fields of engineering services that contribute to architectural design. Students are expected to conduct their own piece of research, too, and to write a report on the information, practical procedures, calculations and professional guidelines gained throughout the session.

Urban Infrastructure **YCWURINMNF**
In charge: Ass. Prof. Klára Éva Macsinka PhD **1/2/0/M/4**

The subject is to introduce the students to the basic notions, the elements and the operational principles of urban infrastructure, including the catchment of urban centres, too. Transport, water and energy supply, their management organisations and the network of open spaces and their relationships, respectively, will be discussed. After reviewing the basics, the processes of their development are dealt with.

Urban Public Administration **YAWURPAMNF**
In charge: Coll. Prof. Tamás Lukovich PhD **2/0/0/E/3**

The subject is to introduce the tasks of municipalities and the state in the administration of the municipalities. Structure, functioning of the municipalities, role of officials and representative body. Urban management and infrastructure. Budget management, property management and real estate management. Local taxes. Municipal developments. Procurement process. Tasks of county and municipal authorities in the development of land and settlements. Public interest and private interests.

Municipal Architecture and Administration **YAWMAAAMNF**
In charge: Coll. Prof. Tamás Lukovich PhD **2/0/0/M/3**

The Municipal Architecture and Administration tasks related to urban development and settlement planning, documents for urban development: urban development concept, integrated urban development strategy, documents of settlement planning. Specific legal institutions. Municipal image procedures and townscape protection regulation. Spatial planning plans, their hierarchy – national, regional, county. Tasks related to heritage and nature conservation. Partnership and communication.